

Claim Amendments

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Claims 1-10 (cancelled).

Claim 11 (currently amended): A device for monitoring a gas volume in a unit filled with a liquid, the unit having an inflow line with at least one expansion vessel, the device comprising:

a stationary shaft mounted in the expansion vessel;

at least one buoyant body floating in the liquid, said buoyant body being connected to said shaft and pivotally mounted with respect to said shaft;

a connecting element connecting said buoyant body to said shaft at a spacing distance from said shaft; and

a stationary force transducer disposed for detecting a torque on said connecting element at a predetermined distance from a pivot point defined by said shaft.

Claims 12-13 (cancelled).

Claim 14 (currently amended): The device according to claim [[13]] 1, which further comprises a processing device connected to receive a signal generated by said force transducer, and wherein, if a predetermined torque is exceeded as measured in said force transducer, said processing device generates a warning message.

Claim 15 (previously presented): The device according to claim 11, wherein said at least one buoyant body is one of a plurality of buoyant bodies disposed at defined vertical levels, said shaft is one of a plurality of mutually parallel shafts and said buoyant bodies are respectively offset from one another with respect to said shafts, and said buoyant bodies are formed of mutually different sizes and/or densities.

Claim 16 (currently amended): ~~The device according to claim 12, which further comprises~~

A device for monitoring a gas volume in a unit filled with a liquid, the unit having an inflow line with at least one expansion vessel, the device comprising:

a stationary shaft mounted in the expansion vessel;

at least one buoyant body floating in the liquid, said
buoyant body being connected to said shaft and pivotally
mounted with respect to said shaft;

a connecting element connecting said buoyant body to said
shaft at a spacing distance from said shaft; and

a stationary protractor disposed to measure an angle between
said connecting element and a horizontal axis extending
transversely to said shaft.

Claim 17 (previously presented): The device according to
claim 16, which further comprises a processing device
connected to receive a signal from said protractor, and
wherein, when a predetermined angle of said connecting element
is exceeded, said processing device generates a warning
signal.

Claim 18 (currently amended): The device according to claim
[[11]] 16, further ~~comprises a~~ wherein said stationary
protractor is disposed to detect an inclination of said
buoyant body relative to a horizontal.

Claim 19 (previously presented): The device according to
claim 18, which further comprises a processing device

connected to receive a signal from said protractor, and wherein, when a predetermined inclination of said buoyant body is exceeded, said processing device generates a warning signal.

Claim 20 (previously presented): The device according to claim 11, which comprises additional elements selected from the group consisting of capacitive elements, inductive elements, and optical elements associated with said buoyant body and configured to generate respective electromagnetic, electrical, or optical signals, and a processing device connected to receive the signals generated by said elements.

Claim 21 (currently amended): A method for monitoring a gas volume in a unit filled with a liquid, the method which comprises:

providing the unit with an inflow line and at least one expansion vessel;

providing a buoyant body floating in or on the liquid in the expansion vessel, with the buoyant body being pivotally connected to a stationary shaft by a connecting element connecting the buoyant body to the shaft at a spacing distance from the shaft, and

detecting a pivoting movement of the floating body with respect to the shaft by using a stationary force transducer for detecting a torque on the connecting element at a predetermined distance from a pivot point defined by the shaft or a stationary protractor disposed to measure an angle between the connecting element and a horizontal axis extending transversely to the shaft.

Claim 22 (previously presented): The method according to claim 21, which comprises fixing the shaft at a defined vertical level within the expansion vessel as determined on a basis of a maximum gas volume to be detected relative to an inner surface of a top cover of the expansion vessel.

Claim 23 (previously presented): The method according to claim 21, which comprises mounting the shaft with a fixing device at predetermined vertical levels within the expansion vessel.